

# Customer Generation - SDG&E Interconnection Process

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Omaha, Nebraska*

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# So Where Did It All Start?

- ☐ Process began in December 1999 with an Energy Commission led workshop and subsequent order establishing Rule 21 Working Group.
- ☐ Approximately 75 people actively attended, including SMUD, LADWP, the Cities of Redding, Riverside, and others.
  - ♦ Utilities, manufacturers, energy marketers participated.
  - ♦ Open process with opportunities to address concerns.

## What Were the Objectives?

- ☐ Rules should be uniform throughout California.
- ☐ A level playing field should be established for all DG providers.
- ☐ Utilities should be fairly compensated for distribution services that support DG installations and customers.
- ☐ Rules, protocols and processes should be clear and transparent.
- ☐ Rules should be technology neutral, except when differences are fully justified.

# Operating in “parallel”

**“SDG&E Requirements common to ALL interconnections!”**

- ☐ Compliance with SDG&E interconnection (IC) guidelines; Electric Rule 21
- ☐ Request and pay for applicable IC studies; submit completed application (NEM facilities exempt);
- ☐ Responsible for any cost associated with upgrades to SDG&E electric system (NEM facilities exempt);
- ☐ Must execute an IC agreement; and
- ☐ Must receive written approval (“letter”) from SDG&E to begin operation.

# Things to consider before starting the SDG&E interconnection process!

- ☐ Qualifying Facility (“QF”) or non-QF;
- ☐ Cogeneration (“cogen”) or non-cogen;
- ☐ Self-serve only;
- ☐ Self-serve/sell excess;
- ☐ Sell only;
- ☐ Eligible for Net Metering;
- ☐ IC at distribution or transmission.

# Tariff Impacts

- ☐ Operate in parallel under existing electric service tariff
- ☐ Other possible applicable CPUC electric tariffs:
  - ♦ S (Standby)
  - ♦ E-Depart (PPP,ND)
  - ♦ Rule 23 (CTC; non-cogen only)

## Rule 21 - IC process

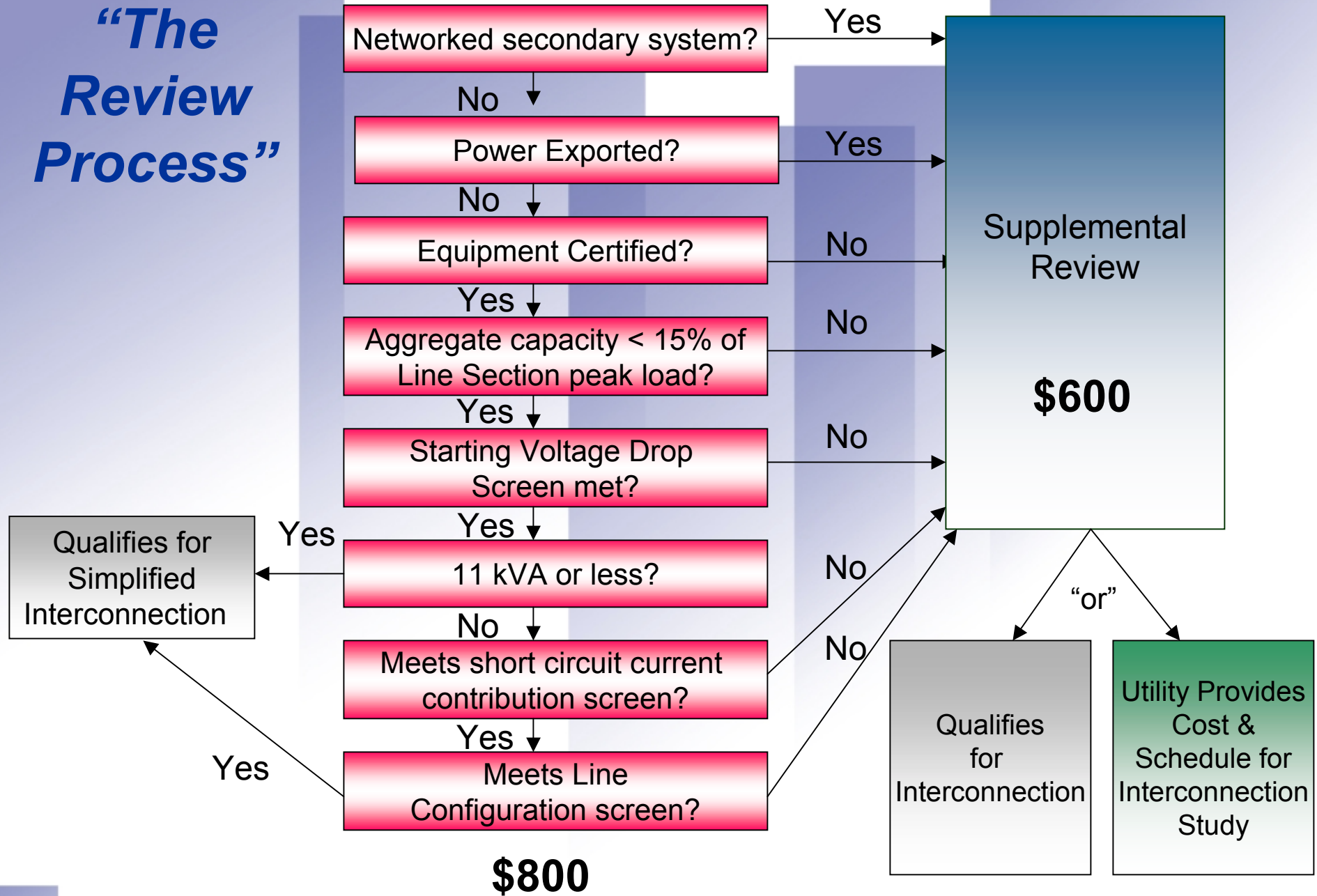
- ☐ Simpler
- ☐ Faster
- ☐ Cheaper
- ☐ Effective January 5, 2001

# Rule 21 - Highlights - (<http://www.sdge.com/tariff/>)

- ☐ Applicable: CPUC Jurisdictional Projects only
- ☐ Application Process
  - ♦ Standard CPUC Form
  - ♦ Application Fee:
    - \$800: Initial Review only
    - \$600 add'l: Supplementary Review
    - Cost estimate for IC Study
  - ♦ SDG&E to complete within 10/20 days (init./supp rev. only)
- ☐ Review Process determines if:
  - ♦ Project qualifies for Simplified IC
  - ♦ Project qualifies for IC with Supplemental Review
  - ♦ Project requires an IC Study



# ***“The Review Process”***



# Sale of Excess Energy Options

□  $\leq$  100 kW - **CPUC** jurisdictional; SDG&E obligated to purchase (QF only)

□  $>$  100 kW - **FERC** jurisdictional

- ♦ **IC *Distribution*** - Execute Service Agreement under the Wholesale Distribution Tariff (“WDT”); Sell to qualified wholesaler through ISO; Requires Sch. Coordinator
- ♦ **IC *Transmission*** - Sell to qualified wholesaler through ISO; under the Transmission Owner’s Tariff (“TOT”)



# Net Energy Metering

- Applicable to “solar” and “wind” technologies ONLY!
- Original program modified by AB1 29X
- Two programs:
  - ♦ ✂ 10 kW (Original - Residential and Sm. Comm.)
  - ♦ > 10 kW ✂ 1,000 kW (Modified - All Other Cust.)
- Exempt from all IC Review Fees and IC system costs
- The Modified program scheduled to end Dec. 31, 2002
- Current status of NEM projects:
  - ♦ Operational - 407 units; 1,266 kW
  - ♦ Pending - 118 units; 2,084 kW

## IC activity in other states - ([www.irecusa.org/connect/state-by-state.pdf](http://www.irecusa.org/connect/state-by-state.pdf))

### Status of Interconnection Rules for Renewables and Distributed Generation

● = work in this area complete; P = pending rules or ongoing work in this area; ED = early discussions in this area.

	Small Renewables			Distributed Generation		Applicable Utilities
	Net Metering	Interconnection Rules	Date Effective (expected)	Interconnection Rules	Date Effective (expected)	
Arkansas	●	ED	(2001)			All
Arizona	●	P		P		IOUs & Coops
California	●	●	1998	●	2001	IOUs
Connecticut	●					IOUs
Delaware	●	●	2000	●	2000	All
Florida	P	P	2001	ED		IOUs
Georgia	●	P	2001			IOUs
Illinois	●	●	1999	P		IOUs
Kansas	●	ED	2001			All
Maine	●	●	1998			Retail Suppliers
Maryland	●	●	2000			IOUs & Munis
Mass.	●	P		ED		Retail Suppliers
Michigan		P		P		IOUs & Coops
Nevada	●	●		ED		IOUs
New Hampshire	●	●	2001	ED		Retail Suppliers
New Jersey	●	P	2001			Retail Suppliers
New Mexico	●	●	1999			IOUs
New York	●	●	1999	●	2000	IOUs
N. Carolina	P	P	2001			IOUs
Ohio	●	●	2000	●	2000	Retail Suppliers
Oregon	●	●	2000			All
Pennsylvania		●	2000	P		Retail Suppliers
Rhode Island	●	●	1998			Retail Suppliers
Texas	●	●	1999	●	2000	Retail Suppliers
Utah				ED		
Vermont	●	●	1999			All
Virginia	●	P	2002	ED		All
Washington	●	P				All
West Virginia				ED		
Wisconsin	●	P	(2001)	P	(2001)	IOUs
Wyoming	●	ED	(2001)			IOUs & Coops

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